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#### Special points of interest:

- The 2002 Lucas County Engineer's Highway Map is available from the Engineer's Office
- Come visit the Lucas County Auditor's ARIES GIS system on the web at <http://co.lucas.oh.us/Auditor>
- Please submit your pictures, ideas and articles for the next issue to Scott Bernhard by July 12, 2003

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## The Earley Edition

*Keith G. Earley, P.E., P.S.*  
*Lucas County Engineer*

### Engineer's Message

Americans now face several challenging issues. Threats to homeland security, the escalation of war, a declining economy, and an increasing deficit could affect everyone. State and local governments must balance their budgets, so they are faced with some immediate difficult choices. In good economic times or bad economic times, we should always attempt to provide the best service possible for each tax dollar. With the passage of H.B. 87, there will be increased revenue for roads and bridges, but our department will only receive a small increase. It is projected that our 2003 budget would increase by less than 2%. The 2004 and 2005 budget would each increase approximately 3.5% and the increases would end in mid 2006. However, the last two cent increase is contingent upon O.D.O.T.'s failure to obtain significant increases in federal highway funds. Since the last increase ten years ago, our revenue has been eroded by inflation. These increases will not cover that loss, but it will help our financial outlook.

We are nearing the end of a much tougher than normal winter. To date, we have used more salt than last year, and overtime hours are also up. We can probably expect a higher price for salt next winter and with gasoline prices up, it will cost more to operate our fleet. There is a proposed 31% increase in the cost of natural gas, which would result in an increased cost of heating our facilities. We can only hope that the cost of asphalt (also a petroleum product) does not increase like it did in the seventies. If our additional revenue covers these increased costs, we should feel fortunate.

We are planning for the assumption of major maintenance responsibilities for 37 bridges on the extension of county roads inside municipalities, and we will have additional responsibilities because of the new Ohio EPA Phase 2 Stormwater Regulations that went into effect March 10, 2003. These new Stormwater Regulations are intended to improve water quality by preventing pollutants from entering storm sewers and draining into the surface waters of the state. Street sweeping, cleaning catch basins and storm sewers, and better erosion control are some activities that will need to be improved. As you can see, we will face many new challenges. I know that we can work together to meet these challenges and provide the service that the public needs and deserves. I believe that we can be proud of the services we have provided, and would like to thank all of my employees and staff for your valuable service.

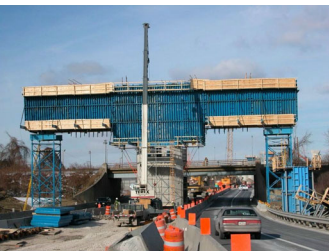




SIDE PHOTO OF PRE-CAST  
CONCRETE SEGMENTS



STEEL REINFORCEMENT BEING  
ASSEMBLED FOR CONC. SEGMENT



"HAMMERHEAD" PIER  
CONSTRUCTION



CONSTRUCTION OF  
COFFER DAM



JOE RUTHERFORD (ODOT)  
EXPLAINING STEEL REINFORCED  
PIER CAGE ASSEMBLY



SMALLER "WALKING" TRUSS—  
USED TO INSTALL PRE-CAST CON-  
CRETE SEGMENTS

## The Maumee River Crossing Project

BRYAN ZIENTA

A new cable stayed bridge is being constructed on I-280 over the Maumee River in Lucas County. The top of the pylon will reach approximately 400 feet above the river. The top 185 feet of the pylon will have glass panels on all four sides that will be illuminated by 350 LED lighting fixtures offering limitless color options. There will be over 2 million feet of strand in the cable stays that will have stainless steel sheathing. At a cost of approximately \$220 million for the bridge, this is the largest single project in the

history of ODOT. Local Agencies, including the Lucas County Engineers Office, along with area citizens, have been working with ODOT since the inception of the project (13 years ago), and continue to be involved through the Maumee River Crossing Task Force. Construction continues on the Maumee River Crossing Project and approximately 400 of over 3,000 pre-cast concrete segments have been cast. 23 of 181 piers have been completed and 58 piers are currently under construction. 17 pylon shafts have been completed

and the first T-pier has also been constructed. Erection of the first pre-cast segment span was recently completed at the Front Street Ramp. An observation area is located behind the Toledo Fire Station at the corner of Front St. and Consaul St. in east Toledo.

Four web cams are also presently on line and can be viewed on the ODOT district 2's website at <http://www.dot.state.oh.us/dist2/webcams/mrc/MRCwebcams.htm>

## Funding for Open Space Now Ready

SCOTT BERNHARD

*"You observe a lot by just watching." — Yogi Berra*

The *Clean Ohio Fund* program was created by the voters of Ohio to preserve natural areas and farmland, protect streams, create outdoor recreational opportunities, and revitalize urban areas by returning contaminated properties to productive use. Keith Earley is a member of the Natural Resources Assistance Council, which ranks prospective open space and riparian corridor projects, and Scott Bernhard is the liaison for the Council to the Ohio Public Works Commission, which administers the program. Terry Seidel, Council Chairman, stated "Lucas County

residents will soon begin to see direct benefits of their support for this program. We are fortunate to have incredible natural areas such as the Oak Openings Region. The funds will aid in the protection of our most viable natural areas and increase our quality of life". Lucas County received \$1,266,080 for the first round of funding and applications were accepted and ranked by the Council. A project by the Toledo Area Metroparks requesting \$822,548 to buy additional land for expansion of Pearson Park was the highest

ranked project, and the land has since been purchased. Round 2 of applications are now being accepted, and with the \$443,532 carried over from the first round, approximately \$1,700,000 is available to local political subdivisions, conservancy, recreation districts, park districts, and non-profit organizations that deal with open spaces and riparian corridors in Lucas County. Program information can be found on the web at [www.pwc.state.oh.us](http://www.pwc.state.oh.us).



New CEAO logo adopted from design by Brian S. Miller, Lucas County Engineers

## CEAO Bridge Inspection Program

BRIAN S. MILLER

Back in March of 2001, the Lucas County Engineer's Office allowed Brian S. Miller to volunteer to update the CEAO's bridge inspection software program from a DOS-based software program to a Windows-based software program. "Suffice to say, it has been both challenging and educational for me, but rewarding as well, knowing that I am able to help out other counties across the state manage their bridge inventories and inspections with a software that we have developed. I am also encouraged by the growing amount of

users and their comments and input, so we can truly address all needs with this software," said Brian. With the advent of the new year, the latest version of the software is available from the CEAO website, [www.ceao.org](http://www.ceao.org). Version 3.03 addresses many of the little bugs and annoyances found by users. There will also be a new way of performing updates for the program, with no need to download the "front-end" package, but download the "Updater" program file instead. It will be a much smaller program, but

when run, will transfer all appropriate updates to the existing bridge program that's installed on your PC. Brian is also currently in the development phase for the Palm version of the inspection forms. Other PDA formats are also being considered.

At the CEAO Winter Conference for 2002, Brian was given a "Special Recognition" award for his efforts. Brian adds, "I am deeply honored to have had this opportunity to provide an important service to all the counties throughout the state of Ohio."

## Sign Upgrading Program

RON MYERS



Previous road sign for Centennial Road



Upgraded road sign for Centennial Road

*"the county road system has 7,102 signs being maintained by the Engineer's Office"*

In 2002, Traffic Operations kicked-off several new programs starting with the purchase of a modern sign cutter and software. Utilizing the new equipment, traffic operations personnel completed a pilot road name sign upgrade at 22 intersections along Centennial Road. The road name sign program includes upgrading letter height from 4" to 6" with more reflective and highly visible sign materials. The new road name signs are generally fabricated on panels 9" or 18" high by variable lengths up to 60", with green EC film on white high intensity sheeting. The signs are either ground mounted on 2" square tubing or banded with bracketing to utility or signal poles. The road name sign upgrade program for 2003 includes Central Avenue, US 20-A, Washington Township, and Jerusalem Township.

The Engineer contracted with MasterMind Systems, through a grant with the Ohio Department of Public Safety (ODPS) to provide an updated sign inventory and sign management software. MasterMind found that the County road system has 7,102 signs being maintained by the Engineer's Office. MasterMind also suggested numerous traffic sign maintenance functions such as replacement, revisions to horizontal or verti-

cal clearances, and realignment of supports.

Also in 2002, the Engineer utilized two sign upgrade programs, funded by outside sources. Lake Erie Construction was contracted for one program and the other involved materials purchased for installation by the traffic operations section from County STP Funds. The County STP Contract program included upgrades of 90 advance intersection warning signs, 90 advance road name signs, 46 curve warning signs, and 25 advisory speed plates. The total contract amount was \$38,300.00. The in-house program, utilizing a \$25,000.00 grant funded by ODPS, included upgrades of 89 advance intersection warning signs, 89 advance road name signs, 100 symbol type stop ahead signs, 98 curve warning signs, 39 advisory speed plates, and 84 fluorescent yellow-green signs at school zones. Both sign upgrade programs included use of sign materials with highly reflective high intensity grade sheeting.

This year, the staff plans to utilize the MasterMind software along with updated data from the sign upgrade projects, to further evaluate and upgrade the County's existing traffic control signs.



Upgraded signing at Old State Line Road



**WELCOME** to our newest part-time employee **LA'TORIAN (TORI) SIMMS**. Tori started with the Engineer's Office as a CAD Operator on March 3, 2003. Tori will be graduating from Eastern Michigan University in April of 2003 with a Bachelor's Degree in Computer Aided Drafting.

The Lucas County Engineer is completing the first year of a 3 year collective bargaining agreement with AFSME Local #267. The contract which covers wages, work rules, and various other conditions of employment for the Engineer's 44 unionized employees, is effective through May 14, 2005.

**CONGRATULATIONS** to the newly elected Union Officials:

Ed Schutte - President  
 Jeff Harrison – Vice President  
 Troy Walborn – Secretary/Treasurer  
 Vince Cenicerros – Sgt. of Arms  
 Phil Scofield – Union Steward  
 Gene Lemle – Union Steward  
 Roger Ruhlman – Chief Steward

#### Service Awards

<u>15 Years</u>	<u>20 Years</u>	<u>25 Years</u>
Debbie Ackerman	Joe Poulson	Jon Laney
John Perlaky	Jeff Winn	Brace Gleckler
Phil Scofield	Chris Cornell	
Doug Sweeney		
Walt Harris		

#### EMPLOYEE PROFILE



**Jim O'Hearn—Lucas  
County  
Bridge Engineer**

Jim has been working for the Lucas County Engineer since 1977 and has been the Bridge Engineer for 23 years. He received his Civil Engineering Bachelors Degree in 1962 and his Masters Degree in 1969, both from the University of Toledo. One highlight in his career was receiving a Design Award for the U.S. 6 Bridge over the Maumee River.

He and his wife Peg have five (5) children, Kelly, Michael, Sean, Brian, and Patrick. They also have four (4) grand-children. He is a member of the Blessed Sacrament Parish and is involved with the Diocesan Servant Leadership Group. His hobbies include fishing and golf and he enjoys dining out at Bob Evans.

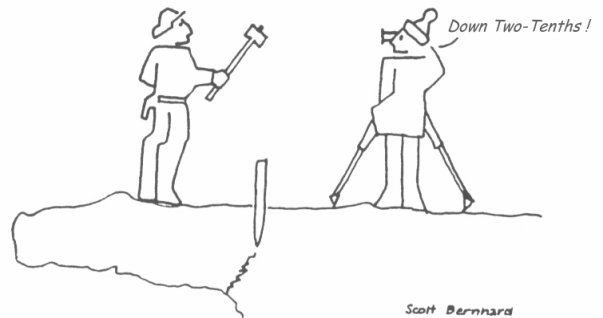
Jim supports his favorite charities, the American Red Cross and the Little Sioux Indian Mission. He says the secret to life is "to love and be loved".

All the staff of the main office appreciate Jim's dedication, as well as his professional capabilities. The Lucas County Engineer's tradition of excellence is due to the efforts of conscientious employees like Jim.

#### HAPPY BIRTHDAY to .....

Greg Wimberly	May	02
Ron Myers		07
Robert Head		10
Galen Molnar		11
Tim Stopera		12
Bob Neubert		19
Joel Kirkwood		22
Tori Simms		23
Mike Dixon		30
Gene Lemle	June	03
Phil Scofield		03
Kim Kettman		06
Bryan Zienta		06
Eric Craft		11
Jon Callahan		14
Ed Tyson		19
Mike Kashmer		28
Joe Poulson		29
James Johnston	July	04
Bob Myers		06
Scott Bernhard		07
Dave Machoukas		09
Mike Harmon		11
Denny Pritscher		16
Troy Walborn		17
Clarence Bocook		19
Jeff Harrison		25
Jeff Lohse		29
George Shepard	August	03
John Perlaky		09
Doug Sweeney		11
John Laney		16
Roger Ruhlman		23
Jim Fox		31

#### *The Adventures of Lucas*



Scott Bernhard

## 2002–2003 Winter Season

PAUL ELINGER

To date, the Road Maintenance Department has used nearly 10,000 tons of salt while clearing 56 inches of snow. There is approximately 1500 tons of salt in storage for the remainder of the season. The yearly figures for snow and ice removal for 2002 as compared to 2001 are as follows:

	2002	2001
Plow/Salt Labor Hrs.	6183	3731
Equip. Hrs.	5288	3550
Restock Labor Hrs.	1950	1659
Equip. Hrs.	1746	1506
Mail Box Repair Cost	\$17,305	\$10,411
Cost/La. Mile for Year	\$707	\$538
Salt Used (Tons)	6800	4500
Total Cost	\$427,661	\$264,763

With assistance from ODOT, the Department experimented with the use of Salt Brine this winter, and equipped Truck (#56) with a 500 Gallon tank and spray bar. The Salt Brine was used for pre-treating bridge decks and certain road locations prone to icing problems, such as Weckerly Rd. and Boy Scout Hill on Sylvania Ave. For next season, the staff is planning a mixing system at the Maintenance Garage and equipping a second truck. The Road Maintenance Dept. is also continuing to use a magnesium chloride product (Caliber M-100) to mix with salt for lower temperatures.

Repairing and replacing damaged mailboxes continues throughout the season and gets especially busy when plowing back heavy wet snow. Also on the drawing board is a salt conveyor system so we can better utilize the salt dome storage at the Garage.



Truck #56 equipped with new salt brine solution equipment. (back)



Truck #56 equipped with new salt brine solution equipment. (side)

## 2002 Big Year for Drainage and Stone Berm Projects

BOB MYERS

Construction by the Road Maintenance Department set a new high for small drainage projects with 21 projects, at an average cost of just under \$10,000 each. A new high was also set for stone berming at 69 miles, at an average cost of approximately \$2500/mile. This record may stand for some time as it represents almost 25% of the County's road system. Force account work represents about 70% of the construction work at the Garage and had an average cost of just over \$6,000 per mile. "Nice Job" to the road crews.

### Tip of the Hat

- The top rodeo driver this year was Clarence Bocook, and the runner up was Eric Craft.



One of the many snow plows deployed for snow removal

## Equipment Outlook

JIM HALL

The Road Maintenance Department has completed a fleet analysis. Baseline Replacement Criteria is as follows:

Jeeps, Cars/Pickups - 110,000 miles and 5 years  
Dump-trucks 110,000 miles and 10 years

Specialty and Heavy Equipment – 12 to 20 years

A five year modified replacement program has been determined.

The following vehicles are scheduled for replacement in 2003:

Jeeps #9 and #11	Low Profile Dump Truck #66
Forestry Truck with Aerial Device #57	Single Axle Dump Truck #74



New Construction—Centennial Road Ditch Enclosure

## Resurfacing With Smoothseal

JEFF LOHSE

The Lucas County Engineer plans to resurface 8 miles of Roads with Smoothseal in 2003. Smoothseal is a finely graded polymer asphalt concrete that blends fine graded aggregates with a polymer modified asphalt to produce a durable dense graded mix. It can be placed as thin as 3/4" and is used to restore a wearing course that is weathered, ravled or slippery due to crack

seal or other surface distresses. ODOT 854 Supplemental Spec. Type A uses more sand and should be used in low volume or subdivision roads. Type B has more aggregates and would be used on County Roads or State Routes. Smoothseal is difficult to hand rake so feathering of drives is done with a conventional 448 Surface Course Mix. In 2002 it was used by Lucas County on Weckerly Road from

Monclova Road to US 20A. It was also used by ODOT in 2002 on US 23 between Central Avenue and the Michigan State Line. Typical cost per cubic yard in place ranges from \$75 to \$90. Some benefits of Smoothseal are extending pavement surface life, adding structural value, and a quiet smooth ride.



Intersection of Weckerly Road and Monclova Road



Keith G. Earley, Lucas County Engineer

## Keith is Named Engineer of the Year for 2002 by CEAO

Lucas County Engineer Keith Earley was recently named 2002 County Engineer of the Year by his colleagues in the County Engineers Association of Ohio at the group's winter conference.

Keith was honored for the contributions that Lucas County made to the association in the past year. Lucas County was one of the first to implement new federally required procedures to report the value, condition, and funding requirements of infrastructure assets. Representatives of the Lucas County Engineer and Auditor shared their cooperative procedures at a conference presentation last year. The association also recognized

Brian S. Miller, computer systems manager for the Lucas County Engineer, for updating the bridge inspection software system utilized by all county engineers.

"Lucas County is at the forefront of using database management to inventory county roads and bridges as a means to provide solid maintenance and identify any safety issues," said Earley. "It is always nice to be recognized by your colleagues, but this award is reflective of the dedicated, innovative, and hard-working staff that I have the privilege of working with every day."

Keith has been an active member

of the association for two decades, and served as the group's president in 1995. Earley was appointed as Lucas County Engineer on January 1, 2000, after serving as deputy county engineer for one year. Prior to that, Earley served as the Mercer County (Ohio) Engineer for sixteen years. Before entering public service, Earley had fourteen years of private-sector engineering and survey experience in Ohio and California.

*"Government is not reason, it is not eloquence, it is a force; like fire, a troublesome servant and a fearful master. Never for a moment should it be left to irresponsible action."*  
-George Washington

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BRIAN S. MILLER

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PAUL ELINGER - ROAD MAINTENANCE

*The Lucas County Engineer's Office is dedicated to maintaining a level of service that is beyond expectations, and to provide a safe and efficient system of county and township roads and bridges for the benefit of our entire region.*



**WE'RE ON THE WEB @**  
**[HTTP://CO.LUCAS.OH.US/ENGINEER](http://co.lucas.oh.us/engineer)**